

**Attorney Docket No. USA.353**  
**Confirmation No. 6650**

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re: Bettina Steinmann  
Serial No.: 10/644,299  
Filed: August 19, 2003  
For: Nanoparticle-Filled Stereolithographic Resins

Group Art Unit: 1732  
Examiner: Leo B. Tentoni

May 22, 2007

MAIL STOP APPEAL BRIEF - PATENTS  
Commissioner for Patents  
Alexandria, VA 22313-1450

**REPLY BRIEF UNDER 37 CFR § 41.41**

This Reply Brief is responsive to the Examiner's Answer mailed March 22, 2007, in the above-referenced application.

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1. ***Status of Claims.***

As set forth in the Examiner's Answer mailed March 22, 2007, the present appeal involves Claims 1-20, which are currently under final rejection as set forth in the final Office Action mailed August 29, 2005. Applicant is concurrently filing herewith an Amendment After Appeal Pursuant to 37 C.F.R. § 41.33(b) to rewrite dependent Claim 11 into independent form. The Amendment After Appeal also cancels Claim 21, in view of Claims 1, 2 and 21 of commonly owned copending Application Serial No. 11/457,898, filed July 17, 2006. Claims 22-42 have previously been withdrawn from consideration as drawn to a non-elected invention.

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2. ***Grounds of Rejection to Be Reviewed on Appeal.***

The Examiner's Answer mailed March 22, 2007, sets forth the following grounds of rejection to be reviewed on Appeal:

Claims 1-10 and 12-20 stand rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al. (EP 0831373 A2).

Claims 1-20 stand rejected under 35 U.S.C. 102(e) as being anticipated by Napadensky et al. (U.S. Patent Application Publication 2003/0207959 A1).

Claims 1-20 stand rejected under 35 U.S.C 103(a) as being unpatentable over Napadensky et al. (U.S. Patent Application Publication 2003/0207959 A1).

Applicants note with appreciation the indication by the Examiner that the rejections of Claim 21 have all been withdrawn. As noted herein, Claim 21 is canceled in view of Claims 1, 2 and 21 of commonly owned copending Application Serial No. 11/457,898, filed July 17, 2006.

Applicants respectfully request clarification of the following. Pages 4-5 of the Examiner's Answer repeat the prior rejection of Claims 1-10 and 12-21 under 35 U.S.C. 102(b) as being anticipated by Haruta et al. (EP 0830928 B1). See also the discussion of Haruta on pages 7-8 of the Examiner's Answer. Yet, this grounds of rejection is absent on page 3 under the heading "(6) Grounds of Rejection to be Reviewed on Appeal."

Applicants also request clarification that all grounds of rejection of claim 21 have been withdrawn, in view of the apparent typographical errors on page 4, second to the last line (in the discussion of Haruta et al.) and page 7, line 1 (in the discussion of Napadensky et al.).

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3. *Argument.*

For the reasons previously presented by Applicants, Applicants respectfully submit that the cited documents fail to teach or suggest the claimed invention, and there is no motivation to modify the references as suggested by the Examiner.

Applicant offer the following additional comments in response to arguments presented in the Examiner's Answer mailed March 22, 2007.

3. *Argument (continued).*

- A. Claims 1-10 and 12-20 are patentable under 35 U.S.C. 102(b)  
over Haruta et al. (EP 0830928 B1).

The Examiner argues that Claims 1-10 and 12-21 are anticipated by Haruta et al. As noted herein, the Examiner's Answer indicates that all rejections of Claim 21 have been withdrawn. Applicants respectfully maintain that Haruta et al. does not anticipate the remaining claims. Nonetheless, without prejudice or disclaimer to Applicants, and to advance prosecution of this matter and streamline the issues for consideration on appeal, Applicants are presenting concurrently herewith an Amendment After Appeal Pursuant to 37 C.F.R. § 41.33(b) to rewrite dependent Claim 11 into independent form. Applicants respectfully submit that the Amendment After Appeal Brief obviates this ground of rejection.

3. *Argument (continued).*

- B. Claims 1-10 and 12-20 are patentable under 35 U.S.C. 102(b)  
over Watanabe et al. (EP 0831373 A2).

The Examiner argues that Claims 1-10 and 12-20 are anticipated by Watanabe et al. (EP 0831373 A2). Applicants respectfully maintain that Watanabe et al. does not anticipate the remaining claims. Nonetheless, without prejudice or disclaimer to Applicants, and to advance prosecution of this matter and streamline the issues for consideration on appeal, Applicants are presenting concurrently herewith an Amendment After Appeal Pursuant to 37 C.F.R § 41.33(b) to rewrite dependent Claim 11 into independent form. Applicants respectfully submit that the Amendment After Appeal Brief obviates this ground of rejection.

3. ***Argument (continued).***

C. Claims 1-20 are patentable under 35 U.S.C. 102(e) over

Napadensky et al. (U.S. Patent Application Publication 2003/0207959 A1).

The Examiner argues that Claims 1-20 are anticipated by Napadensky et al. (U.S. Patent Application Publication 2003/0207959 A1). Applicants respectfully submit that Napadensky et al. also does not anticipate the Claims 1-20 for the reasons of record and offer the following additional comments.

The Napadensky et al. method is specific to a three dimensional printing method. See the assertions throughout Napadensky et al. that the invention provides a method for the preparation of a three-dimensional object by three-dimensional printing in paragraphs [0012], [0036], [0065], [0070], [0072], [0092], [0203], and [0208], among others. See also the discussion of various three dimensional printing systems and techniques in accordance with the invention at paragraphs [0037], [0065], [0068], [0076]-[0080], and [0203]-[0207], among others.

Stereolithography and three dimensional printing are recognized in the art as different processes. The differences are further evidenced by Napadensky et al.'s discussion of three dimensional printing, as compared to Applicants' description of stereolithography (see, for example, paragraph [0004] of the present application). In any event, an Applicant is entitled to be his or her own lexicographer and thus may provide a definition for certain terms used in the claims. Accordingly, the meaning of words used in a claim, such as the term "stereolithography" in claims 1-20 of the present application, is not construed in a lexicographic vacuum, but in the context of the specification, and office personnel must rely on the Applicant's disclosure to properly determine the meaning of terms used in the claims.

Napadensky et al. does not teach the claimed stereolithography methods. Applicants respectfully submit that the only reference to stereolithography in Napadensky et al. is in the Background discussion. This sole reference is limited to a discussion of compositions disclosed in another U.S. patent stated to be useful for stereolithography.

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The standard for anticipation is one of strict identity. Federal Circuit decisions repeatedly emphasize that anticipation is established only if all the elements of an invention, as stated in a patent claim, are identically set forth in a single prior art reference. *Gechter v. Davidson*, 116 F.3d 1454, 1457, 43 USPQ 2d 1030, 1032 (Fed. Cir. 1997); *Glaverbel Societe Anonyme v. Northlake Marketing & Supply, Inc.*, 45 F.3d 1550, 1554, 33 USPQ 2d 1496, 1498 (Fed. Cir. 1995). It is not sufficient that each element be found somewhere in the reference; the elements must be arranged as in the claim. *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Co.*, 730 F.2d 1452, 1458 (Fed. Cir. 1984).

Napadensky et al. fails to teach each element arranged as claimed and thus cannot anticipate the claimed invention. Applicants accordingly respectfully request that the Board reverse the anticipation rejection of Claims 1-20 in view of Napadensky et al. and order immediate allowance of the same in this case.



3. *Argument (continued).*

D. Claims 1-20 are patentable under 35 U.S.C. 103(a) over

Napadensky et al. (U.S. Patent Application Publication 2003/0207959 A1).

The Examiner argues that Claims 1-21 are rendered obvious by Napadensky et al. (U.S. Patent Application Publication 2003/0207959 A1). As noted herein, the Examiner's Answer indicates that all rejections of Claim 21 have been withdrawn. Applicants respectfully submit that Napadensky et al. also does not render Claims 1-20 obvious for the reasons of record and offer the following additional comments.

As discussed herein, the Napadensky et al. method is specific to three dimensional printing methods. As also discussed herein and in Applicants' Appeal Brief, stereolithography and three dimensional printing are recognized in the art as different processes using different equipment, process steps, and having different issues associated with the same. The differences are further evidenced by Napadensky et al.'s discussion of three dimensional printing, as compared to Applicants' description of stereolithography. In any event, an Applicant is entitled to be his or her own lexicographer and thus may provide a definition for certain terms used in the claims. Accordingly, the meaning of words used in a claim, such as the term "stereolithography" in claims 1-20 of the present application, is not construed in a lexicographic vacuum, but in the context of the specification, and office personnel must rely on the Applicant's disclosure to properly determine the meaning of terms used in the claims.

Napadensky et al. does not teach or suggest stereolithography methods as claimed. Applicants respectfully submit that the only reference to stereolithography in Napadensky et al. is in the Background discussion. This sole reference is limited to a discussion of compositions disclosed in another U.S. patent stated to be useful for stereolithography.

There is no suggestion or motivation to modify the explicit teachings of Napadensky et al. as argued by the Examiner, and any such modification requires an improper hindsight analysis based on the Applicants' own teaching. Rather, the Examiner has impermissibly

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used the Applicants' teaching to hunt through the prior art for the claimed elements and combine or modify them as claimed. *In re Laskowski*, 871 F.2d 115, 117, 19 USPQ 2d 1397, 1398 (Fed.Cir. 1989); *see also In re Fine*, 837 F.2d at 1075 ("One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.").

Inasmuch as Napadensky et al. fails to suggest the claimed invention, the Examiner has failed to establish that the claimed invention is rendered obvious by Napadensky et al. Applicants accordingly respectfully request that the Board reverse the obviousness rejection of Claims 1-20 in view of Napadensky et al. and order immediate allowance of the same in this case.

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In view of the reasons previously presented and the foregoing comments, Applicants respectfully submit that the claimed invention is novel and nonobvious in view of the documents relied upon by the Examiner. Applicants accordingly request that the Board reverse the anticipation and obviousness rejections of Claims 1-20 and order immediate allowance of all claims in this case.

Respectfully submitted,  
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